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ABSTRACT

The background, responsibilities, supervision, preparation, and perceived needs of teaching assistants (TAs) from a representative group of research institutions across the country were studied. The National Graduate Teaching Assistant/Associate Survey was developed through voluntary cooperation of eight public and private research institutions located in diverse geographic areas. A total of 1,357 TAs at the eight institutions responded to the survey for a 32% return rate. The data were analyzed for the entire sample, by institution, gender, citizenship, ethnicity, major discipline, and major department. Needs of international TAs were also identified. Thirty-one percent of the sample were fully responsible, 35% worked with one faculty member, and 34% worked with a team. The major comments and suggestions of respondents indicated they needed more support (20%); they had inadequate time (16%); and the need for formal training programs (14%). Recommendations based on the responses include: institutions should survey TAs to identify needs and the success of existing training programs; formal required orientation and training programs should be established for graduate TAs. Six references are included. (SW)

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A NATIONAL STUDY OF TEACHING ASSISTANTS

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This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Sheraton Inner Harbor Hotel in Baltimore, Maryland, November 21-24, 1987. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

A National Study of Teaching Assistants

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The teaching assistants of today are the potential faculty members of tomorrow and they teach many of today's undergraduate courses. Unfortunately, there is a general although not necessarily accurate perception that the teaching performance of many teaching assistants is poor. In some institutions a systematic effort is made to orient and prepare teaching assistants for their roles as lecturers, discussion leaders, graders, advisors, and so on. In other cases, there is no such preparation. Further, there have been almost no previous efforts to get a national picture of the situation from the teaching assistants' perspective.

Approximately 10 years ago, Cashell (1977) conducted a survey of 1000 graduate teaching assistants (TAs) at Syracuse University. The findings indicated that two-thirds of the TAs lacked any formal preparation in lecturing, preparing tests, counseling students, and leading discussions. More recent studies by Smock and Menges (1985), Bingman (1983), and Wright (1981) clearly indicate that this situation is not unique to Syracuse University nor is it only of historical interest. In fact, a very-recent survey of administrators of 400 institutions conducted by The Ohio State University (1986) shows that 60% of the respondents have a "very high interest" in the area of TA employment and education. Furthermore, the administrators ranked "preparing TAs in pedagogical skills" as the most important topic.

The objectives of the study reported in this paper were to assess the background, responsibilities, supervision, preparation, and perceived needs of teaching assistants (TAs) from a representative group of research institutions across the country. The results reported in this paper (1) provide insights into TAs' situations across institutions and (2) form the basis for making recommendations regarding the development of programs to prepare and support teaching assistants. Other analyses have examined similarities and differences among institutions, males and females, ethnic groups, U.S. versus other citizens, disciplines, and major departments. Diamond and Gray (1986) provides a full report of the study.

In addition to providing a national picture of the perceptions of TAs regarding their situation, the findings of this study provide a benchmark against which other institutions can compare data from their own campuses should they wish to conduct a similar survey. The findings also give the participating universities a reference point against which to compare future results, which may be influenced by

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orientations and other supportive programs created in response to the study recommendations.

Methodology

The National Graduate Teaching Assistant/Associate Survey was developed through the voluntary cooperation of eight major research institutions. Several drafts were circulated before the final draft was created.

The National Graduate Teaching Assistant/Associate Survey has five parts and is based on the original Syracuse survey (Chashell, 1977). The first part asks for demographic information about the TAs (e.g., institution, highest level of education, country of origin, gender). The second part concerns their teaching responsibilities (e.g., lecturing, grading, advising) and the supervision provided by their department. The third part of the survey focuses on TAs' teaching preparation, including whether they are teaching in their discipline, whether their institution provides programs of support, and whether they have held any other teaching positions. In addition, in this section TAs are asked to specify the areas in which they have had preparation and those areas where they would like additional preparation. Section four has items especially for international TAs about (1) any additional orientation or training that they might have received and (2) any problems they have had. The last section asks for general comments or suggestions.

The Survey was either printed at Syracuse University and sent in bulk to a participating university, or camera-ready copy was provided to the participating university to be duplicated on-site. The surveys were distributed by the participating universities and were sent back directly to the Center for Instructional Development. The survey form was self-mailing so that the respondents only had to fold and secure the form and drop it in the mail. The survey was sent with a cover letter signed by the Director of the Graduate School and the Assistant Vice Chancellor for Instructional Development at Syracuse University. The survey was supported by the United States Council of Graduate Schools. However, this organization is in no way responsible for, nor does their support suggest endorsement of the findings of this study.

Initial data analysis consisted primarily of descriptive statistics. The data were analyzed for the entire sample, by institution, by gender, by citizenship, by ethnicity, by major discipline, and by major department.

Sample

Individuals at eight research universities agreed to participate in this study. The participating institutions were: Oregon State University, Stanford University, Syracuse University, Texas A & M University, University of California at Davis, UCLA, University of Nebraska, and University of Tennessee. These institutions were chosen because they are located in diverse geographic areas and include public and private institutions. Several institutions that were involved in early discussions of the survey were unable to participate for administrative reasons.

The survey was distributed to 4230 TAs at these institutions during the spring of 1986. In several cases, such as with Syracuse University, the survey was sent to all teaching assistants. In other cases, it was sent to only a sub-set of TAs selected by the institution. A total of 1357 TAs responded to the survey for a 32% return. Some institutions had as high as a 47% return (as in the case where the survey was distributed with the first issue of a TA newsletter).

More males (59%) than females (41%) responded to the survey. Those with BA/BS degrees accounted for 43%, those with MA/MS degrees accounted for 47% of the respondents, and those with Ph.D. and other degrees accounted for 9%. Most of the respondents were U. S. citizens (83%). Of the 17% who were citizens of other countries, the highest proportion were Asian (45%) and the next highest were European (21%).

Four major disciplines accounted for 79% of the responses: science and mathematics (32%), social sciences (22%), humanities (16%), and engineering (9%). Seven academic departments accounted for 41% of the respondents, although any one department only had four percent to nine percent of the total.

Overall, 75% of the respondents said they plan to teach in a college or university after graduation. About one-third of the respondents were first year TAs with the rest having taught two years or more.

Results

In this section the results are reported for each of the substantive parts of the survey, namely, responsibilities and supervision, teaching preparation, international TA information, and comments or suggestions. Institutional similarities and differences have been reported back to the participating institutions. Results are reported here for the total sample, and by gender, citizenship, and major discipline where important differences exist.

Teaching Responsibility And Supervision

The survey items on responsibility asked TAs to indicate those areas they are responsible for and the adequacy of supervision provided them in each area. The eight areas in Table 1 were indicated by 49% or more of the respondents as areas of responsibility. Table 1 also shows the percentage of respondents who rated the supervision in these areas as adequate. It is interesting to note that the areas of responsibility related to interaction with students, i.e., leading class discussions, conducting review sessions, and lecturing, received the lowest adequacy ratings in regard to supervision.

Insert Table 1 about here

Five of these areas had more than a five percent difference in the responses of males versus females. In four of the five areas females more often reported responsibility: leading class discussions (9% more), preparing tests (7% more), lecturing (6% more), and advising/counseling (5%). Seven percent more males than females reported responsibility for supervising laboratories.

When asked, "Generally do you feel you have received adequate guidance and supervision from the department of college in which you teach?", 80% responded "yes." This is consistent with the pattern of responses regarding individual areas of responsibilities, however, it does mean that 20% of the respondents did not feel that guidance is adequate. Only seventy-nine percent of the females versus 84% of the males reported generally adequate supervision. There were no important differences between U.S. and international TAs. Eighty-five percent of both the science and mathematics and the engineering TAs, 83% of the humanities TAs, and 76% of the social science TAs reported generally-adequate supervision.

TAs were asked to indicate their teaching situation in order to put the responsibility and supervision information into perspective. There is a even split among the three choices they were given: fully responsible (31%), work with one faculty member (35%), and work with a team (34%).

Teaching Preparation

Almost all the TAs who responded felt that their academic background is adequate for their responsibility (96%). There were no important differences among males and females or U.S. and international students in this regard. Differences were modest among the major disciplines, in that responses ranged from 94% for engineers, to 97% for humanities and social science TAs, to 98% for those in

science and mathematics. Eighty-three percent of all the respondents reported that they are teaching in an area that they consider to be their discipline or specialization. Somewhat fewer international TAs (77%) than U.S. TAs (84%) reported teaching in their discipline. TAs in the various disciplines, as well as males versus females, were no more than two percentage points away from the total sample in regard to teaching in their discipline or specialization.

Seventy-nine percent of the respondents said that they have enough time to adequately fulfill their teaching responsibility, which means that 21% feel that they do not have enough time. A major difference exists between males at 84% and females at 73%. Differences are also quite marked in regard to the various major disciplines, with 85% of the engineers, 84% of the science and mathematics TAs, 76% of the social scientists, and 71% of the humanities TAs reporting enough time.

Some 74% of the TAs reported that graduate support programs were offered, with 48% of the respondents reporting programs offered by institutions, 15% by schools or colleges, and/or 31% by departments. Sixty-five percent of the respondents reported participating in such programs. Less than half (44%) had previously held a teaching position with 31% having taught in a K-12 classroom. Twenty-nine percent reported having formal preparation in teaching.

Table 2 shows the percentage of respondents who reported having preparation in various areas related to being a TA. Also shown is the percentage of respondents who indicated that they would like some or more preparation in each area. In general, fewer than 50% of the respondents reported preparation in such areas as new developments in instructional technology (19%), counseling and advising (22%), time management (38%), course evaluation (41%), self-evaluation (42%), and lecturing (47%). Not surprisingly, the most requested areas of preparation were self-evaluation (72%), course evaluation (71%), developments in instructional technology (64%), lecturing (60%), and conducting classroom discussions (55%). Table 2 also shows that the percentage of females reporting preparation and a desire for (more) preparation is consistently higher than males.

Insert Table 2 about here

International TAs

Many international TAs reported additional preparation such as orientation for international students (67%) and the role of the graduate teaching assistant (66%). However, fewer than 60% reported preparation regarding information about the American University (59%), improving language skills (51%), understanding cultural differences (49%), or the role of the student and the teacher in the

American University (40%). Nearly unanimously, they indicated that they were meeting their teaching responsibilities effectively (93%) although there is some variation among the disciplines with science and mathematics at 89%, social science at 95%, engineering at 96%, and humanities at 98%.

Comments And Suggestions

Almost 500 comments and suggestions were made by respondents. The major categories included the need for more support (20%), inadequate time (16%), and the need for formal training programs (14%). For example, one TA commented, "The TAs in our program are given great support, fourteen of us work with one faculty member. We meet formally once a week and informally very frequently. We receive a great deal of respect from faculty and students." Another TA commented, "I could certainly do better in teaching and handling my other responsibilities as a graduate student with a little more support from the department." "Time and office space." were the big concerns of one TA. Still another TA commented that, "No information was made available to me about my teaching assignment until one week before I began actually teaching."

Educational Importance

This study provides first-hand information about the backgrounds and experiences of teaching assistants. The information collected as part of this study has been used at Syracuse University to create a campus-wide TA orientation and training program. Other institutions can use the information as the basis for their own study of TAs.

The major recommendations to come out of this study are:

- All institutions with graduate teaching assistants should survey them on a regular basis to identify needs, the success of existing training programs, and problems to be addressed.
- Formal, required orientation and training programs should be established for all graduate teaching assistants, if they do not already exist, and should cover:
  - -techniques of self-evaluation
  - -techniques of course evaluation
  - -uses of and developments in instructional technology
  - -lecturing techniques
  - -ways to direct class discussions.
- Efforts should be made to improve faculty supervision and guidance in ways that are equitable to both male and female graduate teaching assistants.

- The workloads of teaching assistants should be monitored, especially in those courses with heavy writing requirements, so that they are, on the average, 20 hours per week.
- Care should be taken in the assignment of teaching assistants to ensure that they have the required academic background to carry out their assigned responsibilities.
- International students should have special training and orientation programs that emphasize:
  - -the organization and administration of American universities
  - -cultural differences they can anticipate in American students
  - -the role of the student and teacher in American universities
  - -oral language proficiency.
- Graduate teaching assistants' efforts and, for that matter, all teaching should be recognized for their essential contribution to the accomplishment of the mission of the institution and should be rewarded accordingly.

A long-term benefit of the improvement of TAs' teaching ability will be the general improvement of postsecondary education since many graduate teaching assistants are bound for college teaching positions.

References

Cashell, J. G. (1977, May). Survey results from graduate assistants 1972-1976. Syracuse NY: Syracuse University Center for Instructional Development.

Bingman. R. M. (1983). Use of student evaluations to improve instruction. A paper presented at the annual forum of the Association for Institutional Research, Toronto, Ontario, Canada. (ED 232580).

Diamond, R.M. & Gray, P.J. (1987, January). National study of teaching assistants. Syracuse NY: Syracuse University Center for Instructional Development.

National TA Conference Planning Committee. (1986). TA needs assessment questionnaire results. Columbus OH: The Ohio State University Instructional Development and Evaluation Center.

Smock, R. & Menges, R. (1985, June). Programs for TAs in the context of campus politics and priorities. New Directions for Teaching and Learning, No.22, pp. 21-23.

Wright, D.C. (1981). Integrating GTA training programs with faculty development. A paper presented at the annual meeting of the American Educational Research Association, Los Angeles. (ED 2021278).

Table 1

Teaching Responsibility And The Adequacy Of Supervision

Area	Responsible	Adequate Supervision
Grading	97%	86%
Office Hours	94%	90%
Preparing Tests	72%	80%
Leading Class Discussions	71%	68%
Conducting Review Sessions	69%	76%
Lecturing	60%	76%
Advising/Counseling	50%	82%
Supervising Laboratories/Studios	49%	84%

Table 2

Teaching Preparation

Area	Have Had Preparation			Would Like (More) Preparation		
	total (%)	male (%)	female (%)	total (%)	male (%)	female (%)
Counseling/advising	22	27	25	50	45	57
Knowledge of availability of counseling services	37	33	43	52	48	58
Conducting classroom discussions	54	53	56	55	50	62
Lecturing	47	45	51	60	56	66
Preparing tests	41	37	48	53	48	59
Using media	35	31	41	54	49	61
Preparing your own slides and transparencies	32	32	33	49	45	55
Grading procedures	63	59	69	43	39	48
New developments in instructional technology	19	17	22	64	60	69
University rules and regulations	46	43	52	47	45	51
How to evaluate yourself as a teacher	42	39	48	72	70	75
How to evaluate your course	41	38	44	71	67	76
Developing writing skills	58	52	66	54	52	55
Time management	38	37	40	52	48	56